

Professional and Managerial Branch
Engineering Group
Engineering Associate Series

TRAFFIC ENGINEERING ASSOCIATE II *

12/00 (LBT)

Summary

Under general supervision, perform a variety of traffic engineering functions which require the application of advanced engineering techniques and procedures.

Typical Duties

Perform drafting, computational and design duties in the preparation of plans for intersection improvements and traffic control installation. Involves: assigning and directing drafting required in the preparation of plans; determining and estimating costs of materials; checking horizontal and vertical curves for sight distances, radius, safety lighting and horizontal and vertical alignment of intersections and roadways; reviewing plans and recommending geometric designs; designing traffic signal installations; preparing specifications for traffic control equipment; recommending capital equipment expenditures.

Study traffic flow to detect unsafe or congested conditions. Involves: evaluating statistical and physical data regarding vehicular and pedestrian traffic volumes, feasibility of widening pavement and projected traffic loads; conducting tests with alternate routes or same route with modifications in signals, traffic direction or other traffic control method or technique; evaluating results of tests and recommending corrective actions; determining if traffic control devices are needed based on analysis and field data; computing traffic signal timing.

Conferring with citizens and officials to resolve complaints requiring inter-jurisdictional cooperation. Involves: reviewing plans prepared by public and private engineers, consultants and City engineers; integrating results of studies with other agencies to develop regional transportation plans; overseeing completion of contract projects.

Supervise technical and clerical support staff as assigned. Involves: scheduling, assigning, instructing, guiding, checking and evaluating work; arranging for or engaging in employee training and development; enforcing personnel rules and regulations, standards of conduct, work attendance, and safe work practices; counseling, motivating and maintaining harmonious working relationships among subordinates; recommending staffing and employee status changes; interviewing applicants.

Perform related duties as required. Involves: maintaining records and preparing reports; preparing and conducting presentations before public groups.

Minimum Qualifications

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Civil, Electrical, Computer, Mechanical, Traffic Engineering or related engineering field and two (2) years of professional traffic engineering experience; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Good knowledge of: the principles and practices of traffic engineering; methods, materials, tools and equipment used in traffic control; cost determination techniques. Some knowledge of: supervisory techniques, standards of conduct and work attendance; safe working practices and procedures; federal, state and local laws and ordinances as they apply to traffic control projects.

Ability to: prepare designs, plans and specifications; supervise, train and evaluate assigned personnel; determine project costs; interpret plans and specifications and identify defects; express oneself clearly and concisely, both orally and in writing; establish and maintain effective working relationships with fellow employees and the general public; maintain records and prepare reports.

Skill in the safe operation and care of: personal computer or network work station, including computer-aided drafting and design (CADD), geographic information system (GIS), word processing, spreadsheets and database software; standard drafting instruments; time and distance measuring devices; motor vehicle through city traffic.

Physical Effort & Work Environment: Frequently inspect field installations at construction sites which involves moving about uneven terrain, climbing ladders, bending and stooping, and exposure to other adverse field conditions.

Special Requirement: Respond to Public Works emergencies as necessary during non-working hours.

Licenses and Certificates: Texas Class "C" Driver's License or equivalent license issued by another state.

* The title of Traffic Engineer II can be used provided registration as a Professional Engineer in the State of Texas has been obtained.

Director of Personnel

Department Head